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ing in combination with the second semiconductor region a shorted base-collector region of a lateral transistor extending between the first and second terminals; wherein:

- the first region of the first semiconductor type comprises a first highly doped contact region ohmically coupled to the first terminal and a less highly doped body region of the first conductivity type underlying the first highly doped contact region;
- the second region of the second semiconductor type comprises a second highly doped contact region ohmically coupled to the second terminal and a less highly doped well region of the second conductivity type underlying the second highly doped contact region.
- 9. The device of claim 8, further comprising:
- a buffer region of the second conductivity type underlying the second highly doped contact region and extending into the well region, and more highly doped than the well region.
- **10**. A lateral device for providing diode action on a semi- 20 conductor substrate of a first conductivity type, comprising:
- a buried layer of a second conductivity type different than the first conductivity type overlying the substrate;
- further semiconductor regions overlying the buried layer and having a surface spaced apart from the buried layer; 25
- a first contact region of the first conductivity type in the further semiconductor regions overlying the buried layer and extending to the surface;
- a second contact region of the second conductivity type in the further semiconductor regions overlying the buried 30 later, laterally disposed with respect to the first contact region, and extending to the surface;
- a first terminal ohmically coupled to the first contact region;
- a second terminal ohmically coupled to the second contact 35 region;
- a vertical parasitic device embodying the first contact region, a portion of the further semiconductor regions and the substrate;
- a channel region of the first conductivity type separating 40 the first and second regions at the surface;
- a gate electrode overlying the channel region;
- an isolation region extending downward from the surface between an edge of the gate electrode and a third semiconductor region; and
- a third contact region of the first conductivity type in the further semiconductor regions in proximity to the second contact region and ohmically coupled thereto and to the second terminal, thereby forming in cooperation with the second contact region a shorted base-collector region of a lateral transistor extending between the first and second terminals.

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11. The device of claim 10 wherein:

the further semiconductor regions comprise:

- a body region of the first conductivity type including the first contact region;
- a well region of the second conductivity type including the second and third contact regions and laterally separated from the body region at the surface.
- 12. The device of claim 11, wherein the gate electrode is insulated from the surface, electrically coupled to the first terminal, and overlying the channel region, which separates the body region and the well region at the surface.
- 13. A lateral device for providing diode action on a semiconductor substrate of a first conductivity type, comprising:
  - a buried layer of a second conductivity type different than the first conductivity type overlying the substrate;
  - further semiconductor regions overlying the buried layer and having a surface spaced apart from the buried layer;
  - a first contact region of the first conductivity type in the further semiconductor regions overlying the buried layer and extending to the surface;
  - a second contact region of the second conductivity type in the further semiconductor regions overlying the buried later, laterally disposed with respect to the first contact region, and extending to the surface;
  - a first terminal ohmically coupled to the first contact region;
  - a second terminal ohmically coupled to the second contact region;
  - a vertical parasitic device embodying the first contact region, a portion of the further semiconductor regions and the substrate;
  - a third contact region of the first conductivity type in the further semiconductor regions in proximity to the second contact region and ohmically coupled thereto and to the second terminal, thereby forming in cooperation with the second contact region a shorted base-collector region of a lateral transistor extending between the first and second terminals; and
  - a buried layer contact region of the same conductivity type as the buried layer, extending through the further semi-conductor regions from the buried layer toward the surface.
  - 14. The device of claim 13, further comprising:
  - an ohmic connection located on or above the surface and coupling the buried layer contact region to the second contact region.
- 15. The device of claim 13, wherein the buried layer contact region underlies and makes contact at least with the second contact region.

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